

Main Criteria: Cogent Education's Interactive Cases
 Secondary Criteria: Pennsylvania Academic Standards
 Subject: Science
 Grades: 9, 10, 11, 12



Title	Common Among States	Pennsylvania Academic Standards	Pennsylvania Academic Standards	Pennsylvania Academic Standards	Pennsylvania Academic Standards
Action Potential -	PA	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p> <p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p> <p>CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p> <p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	<p>SI.3. - Identify questions and concepts that guide scientific investigations.</p> <p>SI.4. - Formulate and revise explanations and models using logic and evidence.</p> <p>3.1.10.A2. - Explain cell processes in terms of chemical reactions and energy changes.</p> <p>3.1.10.A5. - Relate life processes to sub-cellular and cellular structures to their functions.</p> <p>3.1.10.A7a. - Describe the relationship between the structure of organic molecules and the function they serve in living organisms.</p> <p>3.1.10.A8. - Investigate the spatial relationships of organisms' anatomical features using specimens, models, or computer programs.</p> <p>3.1.10.B5a. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.</p> <p>3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.</p> <p>3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.</p> <p>3.1.B.A5c. - Explain how the cell membrane functions as a regulatory structure and protective barrier for the cell.</p> <p>3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.</p> <p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p>	<p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p>CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p> <p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p> <p>CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.</p> <p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p> <p>CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; 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			<p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p> <p>CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; 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<p>Cellular Respiration - PA</p>	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p> <p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p> <p>CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; 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CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).

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CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

3.1.C.A7. - Illustrate the formation of carbohydrates, lipids, proteins, and nucleic acids.

3.1.C.B5. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.

CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

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CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.

CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.

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					CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
Diffusion -	PA	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p> <p>CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p> <p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	<p>SI.3. - Identify questions and concepts that guide scientific investigations.</p> <p>SI.4. - Formulate and revise explanations and models using logic and evidence.</p> <p>3.1.10.A5. - Relate life processes to sub-cellular and cellular structures to their functions.</p> <p>3.1.10.A7a. - Describe the relationship between the structure of organic molecules and the function they serve in living organisms.</p> <p>3.1.10.A8. - Investigate the spatial relationships of organisms' anatomical features using specimens, models, or computer programs.</p> <p>3.1.10.B5a. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.</p> <p>3.1.B.A4a. - Summarize the stages of the cell cycle.</p> <p>3.1.B.A4b. - Examine how interactions among the different molecules in the cell cause the distinct stages of the cell cycle which can also be influenced by other signaling molecules.</p> <p>3.1.B.A5d. - Describe transport mechanisms across the plasma membrane.</p> <p>3.1.B.A7a. - Analyze the importance of carbon to the structure of biological macromolecules.</p> <p>3.1.B.A7b. - Compare and contrast the functions and structures of proteins, lipids, carbohydrates, and nucleic acids.</p> <p>3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.</p> <p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p>	<p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p> <p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p> <p>CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p> <p>CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p> <p>CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	<p>SI.2. - Evaluate experimental information for relevance and adherence to science processes.</p> <p>SI.3. - Judge that conclusions are consistent and logical with experimental conditions.</p> <p>SI.4. - Interpret results of experimental research to predict new information, propose additional investigable questions, or advance a solution.</p> <p>SI.5. - Communicate and defend a scientific argument.</p> <p>3.1.12.A1. - Relate changes in the environment to various organisms' ability to compensate using homeostatic mechanisms.</p> <p>3.1.12.A4. - Explain how the cell cycle is regulated.</p> <p>3.1.12.A5. - Analyze how structure is related to function at all levels of biological organization from molecules to organisms.</p> <p>3.1.12.A8. - (CHANGE AND CONSTANCY) Describe and interpret dynamic changes in stable systems.</p> <p>3.1.12.B5. - (PATTERNS) Relate the monomer structure of biomacromolecules to their functional roles.</p> <p>3.1.B.A4a. - Summarize the stages of the cell cycle.</p> <p>3.1.B.A4b. - Examine how interactions among the different molecules in the cell cause the distinct stages of the cell cycle which can also be influenced by other signaling molecules.</p> <p>3.1.B.A5d. - Describe transport mechanisms across the plasma membrane.</p> <p>3.1.B.A7a. - Analyze the importance of carbon to the structure of biological macromolecules.</p> <p>3.1.B.A7b. - Compare and contrast the functions and structures of proteins, lipids, carbohydrates, and nucleic acids.</p>

CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.

CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.

CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.

CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.

CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.

3.1.C.B5. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.

CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

CC.3.5.11-12.1. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.

CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.

CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.

CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.

CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.

CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.

CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).

CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Filtration -	PA	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p> <p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p> <p>CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p> <p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	<p>SI.3. - Identify questions and concepts that guide scientific investigations.</p> <p>SI.4. - Formulate and revise explanations and models using logic and evidence.</p> <p>3.1.10.A5. - Relate life processes to sub-cellular and cellular structures to their functions.</p> <p>3.1.10.A8. - Investigate the spatial relationships of organisms' anatomical features using specimens, models, or computer programs.</p> <p>3.1.B.A5d. - Describe transport mechanisms across the plasma membrane.</p> <p>3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.</p> <p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p> <p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p> <p>CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p>	<p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p>CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p> <p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p> <p>CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.</p> <p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p> <p>CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p> <p>CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p> <p>CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	<p>SI.2. - Evaluate experimental information for relevance and adherence to science processes.</p> <p>SI.3. - Judge that conclusions are consistent and logical with experimental conditions.</p> <p>SI.4. - Interpret results of experimental research to predict new information, propose additional investigable questions, or advance a solution.</p> <p>SI.5. - Communicate and defend a scientific argument.</p> <p>3.1.12.A1. - Relate changes in the environment to various organisms' ability to compensate using homeostatic mechanisms.</p> <p>3.1.12.A5. - Analyze how structure is related to function at all levels of biological organization from molecules to organisms.</p> <p>3.1.12.A8. - (CHANGE AND CONSTANCY) Describe and interpret dynamic changes in stable systems.</p> <p>3.1.B.A5d. - Describe transport mechanisms across the plasma membrane.</p> <p>3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.</p> <p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p>CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p> <p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p> <p>CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.</p> <p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p>
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Membrane Potential -	PA	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p> <p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p>	<p>SI.3. - Identify questions and concepts that guide scientific investigations.</p> <p>SI.4. - Formulate and revise explanations and models using logic and evidence.</p> <p>3.1.10.A2. - Explain cell processes in terms of chemical reactions and energy changes.</p> <p>3.1.10.A5. - Relate life processes to sub-cellular and cellular structures to their functions.</p> <p>3.1.10.A7a. - Describe the relationship between the structure of organic molecules and the function they serve in living organisms.</p>	<p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p>CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p> <p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p> <p>CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.</p> <p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p>	<p>SI.2. - Evaluate experimental information for relevance and adherence to science processes.</p> <p>SI.3. - Judge that conclusions are consistent and logical with experimental conditions.</p> <p>SI.4. - Interpret results of experimental research to predict new information, propose additional investigable questions, or advance a solution.</p> <p>SI.5. - Communicate and defend a scientific argument.</p> <p>3.1.12.A1. - Relate changes in the environment to various organisms' ability to compensate using homeostatic mechanisms.</p>

CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	3.1.10.A8. - Investigate the spatial relationships of organisms' anatomical features using specimens, models, or computer programs.	CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.	3.1.12.A7a. - Evaluate metabolic activities using experimental knowledge of enzymes.
CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.	3.1.10.B5a. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.	CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	3.1.12.A8. - (CHANGE AND CONSTANCY) Describe and interpret dynamic changes in stable systems.
CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.	3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.	CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.	3.1.12.B5. - (PATTERNS) Relate the monomer structure of biomacromolecules to their functional roles.
CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.	CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.	3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.
CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.	3.1.B.A5c. - Explain how the cell membrane functions as a regulatory structure and protective barrier for the cell.	CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.
CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.	CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.	3.1.B.A5c. - Explain how the cell membrane functions as a regulatory structure and protective barrier for the cell.
CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.	3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.
	CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).	CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).	3.1.C.B5. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.
	CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.	CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
	CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.		CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
	CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.		CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
	CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.		CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.
	CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.		CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.

			<p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p> <p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>		<p>CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p> <p>CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p> <p>CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p> <p>CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>
Membrane Transport -	PA	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p> <p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p>	<p>SI.3. - Identify questions and concepts that guide scientific investigations.</p> <p>SI.4. - Formulate and revise explanations and models using logic and evidence.</p> <p>3.1.10.A2. - Explain cell processes in terms of chemical reactions and energy changes.</p> <p>3.1.10.A5. - Relate life processes to sub-cellular and cellular structures to their functions.</p> <p>3.1.10.A7a. - Describe the relationship between the structure of organic molecules and the function they serve in living organisms.</p>	<p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p>CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p> <p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p> <p>CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.</p> <p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p>	<p>SI.2. - Evaluate experimental information for relevance and adherence to science processes.</p> <p>SI.3. - Judge that conclusions are consistent and logical with experimental conditions.</p> <p>SI.4. - Interpret results of experimental research to predict new information, propose additional investigable questions, or advance a solution.</p> <p>SI.5. - Communicate and defend a scientific argument.</p> <p>3.1.12.A1. - Relate changes in the environment to various organisms' ability to compensate using homeostatic mechanisms.</p>

CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	3.1.10.A8. - Investigate the spatial relationships of organisms' anatomical features using specimens, models, or computer programs.	CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.	3.1.12.A5. - Analyze how structure is related to function at all levels of biological organization from molecules to organisms.
CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.	3.1.10.B5a. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.	CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	3.1.12.A7a. - Evaluate metabolic activities using experimental knowledge of enzymes.
CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.	3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.	CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.	3.1.12.A8. - (CHANGE AND CONSTANCY) Describe and interpret dynamic changes in stable systems.
CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.	CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.	3.1.12.B5. - (PATTERNS) Relate the monomer structure of biomacromolecules to their functional roles.
CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.	3.1.B.A5c. - Explain how the cell membrane functions as a regulatory structure and protective barrier for the cell.	CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.
CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	3.1.B.A7b. - Compare and contrast the functions and structures of proteins, lipids, carbohydrates, and nucleic acids.	CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.	3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.
CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.	CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.	3.1.B.A5c. - Explain how the cell membrane functions as a regulatory structure and protective barrier for the cell.
	3.1.C.A7. - Illustrate the formation of carbohydrates, lipids, proteins, and nucleic acids.	CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).	3.1.B.A7b. - Compare and contrast the functions and structures of proteins, lipids, carbohydrates, and nucleic acids.
	CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.
	CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).		3.1.C.A7. - Illustrate the formation of carbohydrates, lipids, proteins, and nucleic acids.
	CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.		3.1.C.B5. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.
	CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.		CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
	CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.		CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
	CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.		CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
	CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.		CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.

			<p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p> <p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>		<p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p> <p>CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p> <p>CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p> <p>CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>
Nitrogen Cycle -	PA	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p> <p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p>	<p>SI.3. - Identify questions and concepts that guide scientific investigations.</p> <p>SI.4. - Formulate and revise explanations and models using logic and evidence.</p> <p>3.1.10.A2. - Explain cell processes in terms of chemical reactions and energy changes.</p> <p>3.1.10.A7a. - Describe the relationship between the structure of organic molecules and the function they serve in living organisms.</p> <p>3.1.10.B5a. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.</p>	<p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p>CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p> <p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p> <p>CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.</p> <p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p>	<p>SI.2. - Evaluate experimental information for relevance and adherence to science processes.</p> <p>SI.3. - Judge that conclusions are consistent and logical with experimental conditions.</p> <p>SI.4. - Interpret results of experimental research to predict new information, propose additional investigable questions, or advance a solution.</p> <p>SI.5. - Communicate and defend a scientific argument.</p> <p>3.1.12.A1. - Relate changes in the environment to various organisms' ability to compensate using homeostatic mechanisms.</p>

CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	4.1.10.B. - Explain the consequences of interrupting natural cycles.	CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.	3.1.12.A7a. - Evaluate metabolic activities using experimental knowledge of enzymes.
CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.	4.1.10.D.1. - Analyze the relationship between habitat changes to plant and animal population fluctuations.	CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	3.1.12.A8. - (CHANGE AND CONSTANCY) Describe and interpret dynamic changes in stable systems.
CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.	4.1.10.E. - Analyze how humans influence the pattern of natural changes (e.g. primary /secondary succession and desertification) in ecosystems over time.	CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.	3.1.12.B5. - (PATTERNS) Relate the monomer structure of biomacromolecules to their functional roles.
CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.	CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.	4.5.12.E. - Analyze how consumer demands promote the production of pollutants that affect human health.
CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.	3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.	CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.
CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	3.1.B.A7b. - Compare and contrast the functions and structures of proteins, lipids, carbohydrates, and nucleic acids.	CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.	3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.
CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.	CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.	3.1.B.A7b. - Compare and contrast the functions and structures of proteins, lipids, carbohydrates, and nucleic acids.
	3.1.C.A7. - Illustrate the formation of carbohydrates, lipids, proteins, and nucleic acids.	CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).	3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.
	CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	3.1.C.A7. - Illustrate the formation of carbohydrates, lipids, proteins, and nucleic acids.
	CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).		3.1.C.B5. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.
	CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.		CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
	CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.		CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
	CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.		CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
	CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.		CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.

			<p>CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p> <p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>		<p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p> <p>CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p> <p>CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p> <p>CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>
Osmosis -	PA	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p> <p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p>	<p>SI.3. - Identify questions and concepts that guide scientific investigations.</p> <p>SI.4. - Formulate and revise explanations and models using logic and evidence.</p> <p>3.1.10.A5. - Relate life processes to sub-cellular and cellular structures to their functions.</p> <p>3.1.B.A4a. - Summarize the stages of the cell cycle.</p> <p>3.1.B.A4b. - Examine how interactions among the different molecules in the cell cause the distinct stages of the cell cycle which can also be influenced by other signaling molecules.</p>	<p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p>CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p> <p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p> <p>CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.</p> <p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p>	<p>SI.2. - Evaluate experimental information for relevance and adherence to science processes.</p> <p>SI.3. - Judge that conclusions are consistent and logical with experimental conditions.</p> <p>SI.4. - Interpret results of experimental research to predict new information, propose additional investigable questions, or advance a solution.</p> <p>SI.5. - Communicate and defend a scientific argument.</p> <p>3.1.12.A1. - Relate changes in the environment to various organisms' ability to compensate using homeostatic mechanisms.</p>

<p>CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p>	<p>3.1.B.A5d. - Describe transport mechanisms across the plasma membrane.</p>	<p>CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p>	<p>3.1.12.A4. - Explain how the cell cycle is regulated.</p>
<p>CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p>	<p>3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.</p>	<p>CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p>	<p>3.1.12.A5. - Analyze how structure is related to function at all levels of biological organization from molecules to organisms.</p>
<p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p>	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p>	<p>CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p>	<p>3.1.12.A8. - (CHANGE AND CONSTANCY) Describe and interpret dynamic changes in stable systems.</p>
<p>CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p>	<p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p>	<p>CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p>	<p>3.1.B.A4a. - Summarize the stages of the cell cycle.</p>
<p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p>	<p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p>	<p>CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p>	<p>3.1.B.A4b. - Examine how interactions among the different molecules in the cell cause the distinct stages of the cell cycle which can also be influenced by other signaling molecules.</p>
<p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p>	<p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p>	<p>CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p>	<p>3.1.B.A5d. - Describe transport mechanisms across the plasma membrane.</p>
<p>CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	<p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p>	<p>CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p>	<p>3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.</p>
	<p>CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p>	<p>CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).</p>	<p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p>
	<p>CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p>	<p>CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	<p>CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p>
	<p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p>		<p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p>
	<p>CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p>		<p>CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.</p>
	<p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p>		<p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p>
	<p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p>		<p>CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p>

			CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.		CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented. CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers. CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic). CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
Photosynthesis -	PA	CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions. CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy). CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently. CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence. CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns. CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.	SI.3. - Identify questions and concepts that guide scientific investigations. SI.4. - Formulate and revise explanations and models using logic and evidence. 3.1.10.A2. - Explain cell processes in terms of chemical reactions and energy changes. 3.1.10.A5. - Relate life processes to sub-cellular and cellular structures to their functions. 3.1.10.A7a. - Describe the relationship between the structure of organic molecules and the function they serve in living organisms. 3.1.10.B5a. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules. 4.1.10.B. - Explain the consequences of interrupting natural cycles.	CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas. CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible. CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently. CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	SI.2. - Evaluate experimental information for relevance and adherence to science processes. SI.3. - Judge that conclusions are consistent and logical with experimental conditions. SI.4. - Interpret results of experimental research to predict new information, propose additional investigable questions, or advance a solution. SI.5. - Communicate and defend a scientific argument. 3.1.12.A5. - Analyze how structure is related to function at all levels of biological organization from molecules to organisms. 3.1.12.A7a. - Evaluate metabolic activities using experimental knowledge of enzymes. 3.1.12.B5. - (PATTERNS) Relate the monomer structure of biomacromolecules to their functional roles.

<p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p>	<p>4.1.10.D.1. - Analyze the relationship between habitat changes to plant and animal population fluctuations.</p>	<p>CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p>	<p>4.5.12.E. - Analyze how consumer demands promote the production of pollutants that affect human health.</p>
<p>CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p>	<p>4.1.10.E. - Analyze how humans influence the pattern of natural changes (e.g. primary /secondary succession and desertification) in ecosystems over time.</p>	<p>CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p>	<p>3.1.B.A2a. - Identify the initial reactants, final products, and general purposes of photosynthesis and cellular respiration.</p>
<p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p>	<p>3.1.B.A2a. - Identify the initial reactants, final products, and general purposes of photosynthesis and cellular respiration.</p>	<p>CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p>	<p>3.1.B.A2c. - Describe the relationship between photosynthesis and cellular respiration in photosynthetic organisms.</p>
<p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p>	<p>3.1.B.A2c. - Describe the relationship between photosynthesis and cellular respiration in photosynthetic organisms.</p>	<p>CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p>	<p>3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.</p>
<p>CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	<p>3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.</p>	<p>CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p>	<p>3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.</p>
	<p>3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.</p>	<p>CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).</p>	<p>3.1.B.A5b. - Explain the role of water in cell metabolism.</p>
	<p>3.1.B.A5b. - Explain the role of water in cell metabolism.</p>	<p>CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	<p>3.1.B.A5d. - Describe transport mechanisms across the plasma membrane.</p>
	<p>3.1.B.A5d. - Describe transport mechanisms across the plasma membrane.</p>		<p>3.1.B.A7b. - Compare and contrast the functions and structures of proteins, lipids, carbohydrates, and nucleic acids.</p>
	<p>3.1.B.A7b. - Compare and contrast the functions and structures of proteins, lipids, carbohydrates, and nucleic acids.</p>		<p>3.1.C.A1. - Explain the chemistry of metabolism.</p>
	<p>3.1.C.A1. - Explain the chemistry of metabolism.</p>		<p>3.1.C.A7. - Illustrate the formation of carbohydrates, lipids, proteins, and nucleic acids.</p>
	<p>3.1.C.A7. - Illustrate the formation of carbohydrates, lipids, proteins, and nucleic acids.</p>		<p>3.1.C.B5. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.</p>
	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p>		<p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p>
	<p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p>		<p>CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p>
	<p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p>		<p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p>
	<p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p>		<p>CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.</p>
	<p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p>		<p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p>

			<p>CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p> <p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>		<p>CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p> <p>CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p> <p>CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p> <p>CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>
Synaptic Transmission - PA	<p>CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.</p> <p>CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).</p> <p>CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.</p> <p>CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.</p> <p>CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.</p>	<p>SI.3. - Identify questions and concepts that guide scientific investigations.</p> <p>SI.4. - Formulate and revise explanations and models using logic and evidence.</p> <p>3.1.10.A5. - Relate life processes to sub-cellular and cellular structures to their functions.</p> <p>3.1.10.A7a. - Describe the relationship between the structure of organic molecules and the function they serve in living organisms.</p> <p>3.1.10.A8. - Investigate the spatial relationships of organisms' anatomical features using specimens, models, or computer programs.</p>	<p>CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p>CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</p> <p>CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p> <p>CC.3.5.11-12.J. - By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.</p> <p>CC.3.6.11-12.A.1. - Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p>	<p>SI.2. - Evaluate experimental information for relevance and adherence to science processes.</p> <p>SI.3. - Judge that conclusions are consistent and logical with experimental conditions.</p> <p>SI.4. - Interpret results of experimental research to predict new information, propose additional investigable questions, or advance a solution.</p> <p>SI.5. - Communicate and defend a scientific argument.</p> <p>3.1.12.A1. - Relate changes in the environment to various organisms' ability to compensate using homeostatic mechanisms.</p>	

CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	3.1.10.B5a. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.	CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.	3.1.12.A5. - Analyze how structure is related to function at all levels of biological organization from molecules to organisms.
CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.	3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.	CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	3.1.12.A7a. - Evaluate metabolic activities using experimental knowledge of enzymes.
CC.3.6.9-10.B.1. - Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.	3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.	CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.	3.1.12.A8. - (CHANGE AND CONSTANCY) Describe and interpret dynamic changes in stable systems.
CC.3.6.9-10.B.2. - Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	3.1.B.A5c. - Explain how the cell membrane functions as a regulatory structure and protective barrier for the cell.	CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.	3.1.12.B5. - (PATTERNS) Relate the monomer structure of biomacromolecules to their functional roles.
CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.	3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.	CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	3.1.B.A2e. - Explain the importance of enzymes as catalysts in cell reactions.
CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	CC.3.5.9-10.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.	3.1.B.A2f. - Identify how factors such as pH and temperature may affect enzyme function.
CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	CC.3.5.9-10.E. - Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).	CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.	3.1.B.A5c. - Explain how the cell membrane functions as a regulatory structure and protective barrier for the cell.
	CC.3.5.9-10.J. - By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.	CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).	3.1.B.A8a. - (CHANGE AND CONSTANCY) Recognize that systems within cells and multicellular organisms interact to maintain homeostasis.
	CC.3.6.9-10.A.1. - Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among the claim(s), counterclaims, reasons, and evidence.	CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	3.1.C.B5. - (PATTERNS) Use models to demonstrate patterns in biomacromolecules.
	CC.3.6.9-10.A.2. - Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form and in a manner that anticipates the audience's knowledge level and concerns.		CC.3.5.11-12.A. - Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
	CC.3.6.9-10.A.3. - Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.		CC.3.5.11-12.E. - Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
	CC.3.6.9-10.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.		CC.3.5.11-12.I. - Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
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			<p>CC.3.6.9-10.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among ideas and concepts.</p> <p>CC.3.6.9-10.B.6. - Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.9-10.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>		<p>CC.3.6.11-12.A.2. - Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p> <p>CC.3.6.11-12.A.3. - Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>CC.3.6.11-12.A.5. - Provide a concluding statement or section that follows from or supports the argument presented.</p> <p>CC.3.6.11-12.B.1. - Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>CC.3.6.11-12.B.2. - Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p>CC.3.6.11-12.B.3. - Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p> <p>CC.3.6.11-12.B.4. - Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p> <p>CC.3.6.11-12.B.5. - Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).</p> <p>CC.3.6.11-12.C. - Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>
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